

The RECOVER Recommendations for CERP Interim Goals and Interim Targets

South Florida Ecosystem
Restoration Working Group
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Programmatic Regulations

Call for the development of:

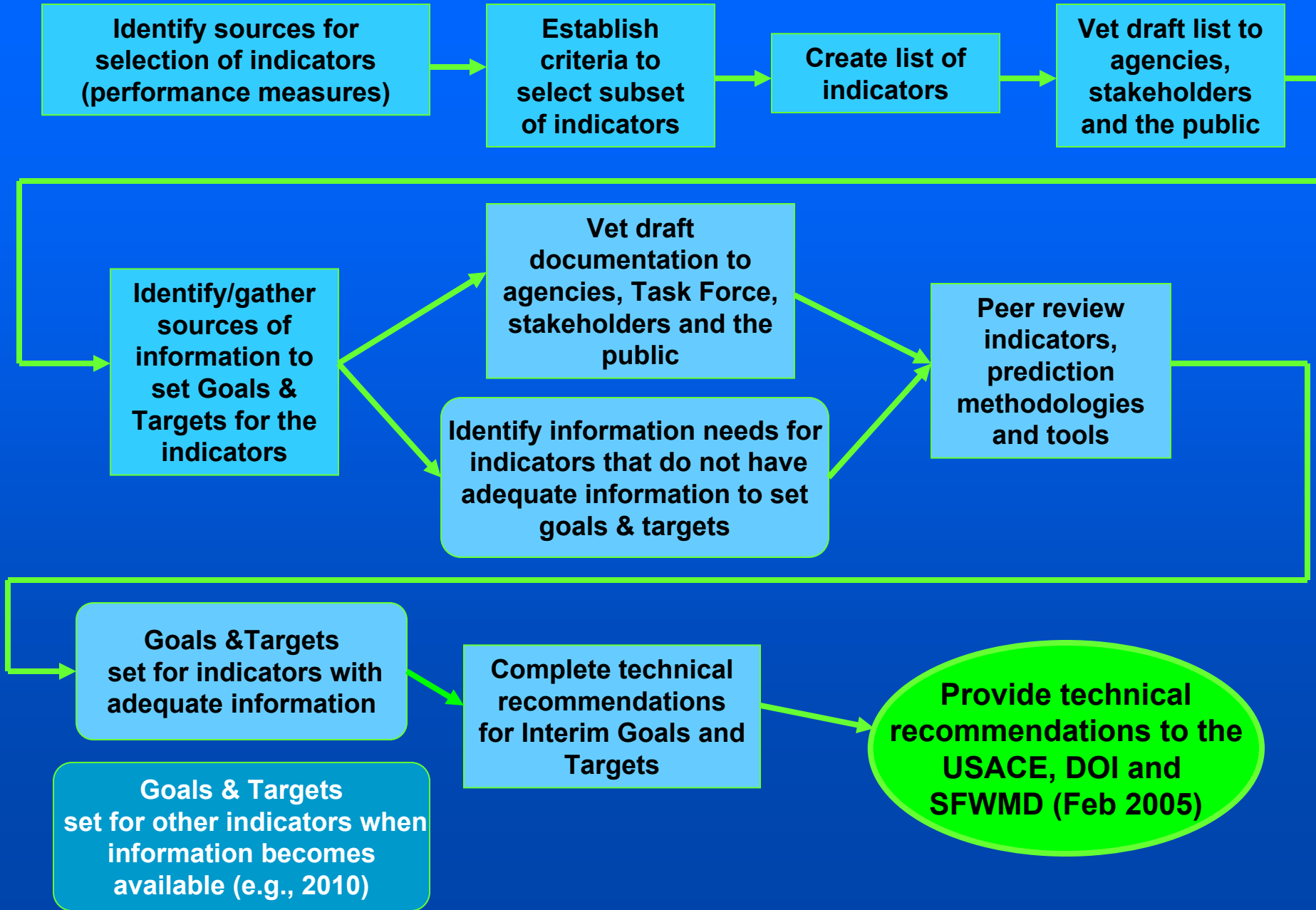
- (385.38) Interim Goals: “...a means by which the restoration success of the Plan may be evaluated at specific points...”
- (385.39) Targets for other water related needs: “...targets for evaluating progress towards achieving other water related needs of the region, including water supply and flood protection...”

Interim goals are “the specific evaluation tool established by [WRDA 2000] for evaluating the restoration success of the Plan”

Interim Goals and Interim Targets – Who & How

- Interim goals and interim targets “shall be developed [by RECOVER] through the use of appropriate models and tools...and best available science and information”
- RECOVER’s recommendations have been developed using the same version of the hydrologic model used to design the CERP (i.e., SFWMM v3.5 – D13R – and all of its assumptions, including the original implementation schedule)
- Recommended Indicators derived from CERP performance measures

RECOVER process for developing Interim Goals and Interim Targets



Organization of RECOVER's Recommendations – Main Report

A. Executive Summary

B. Foreword

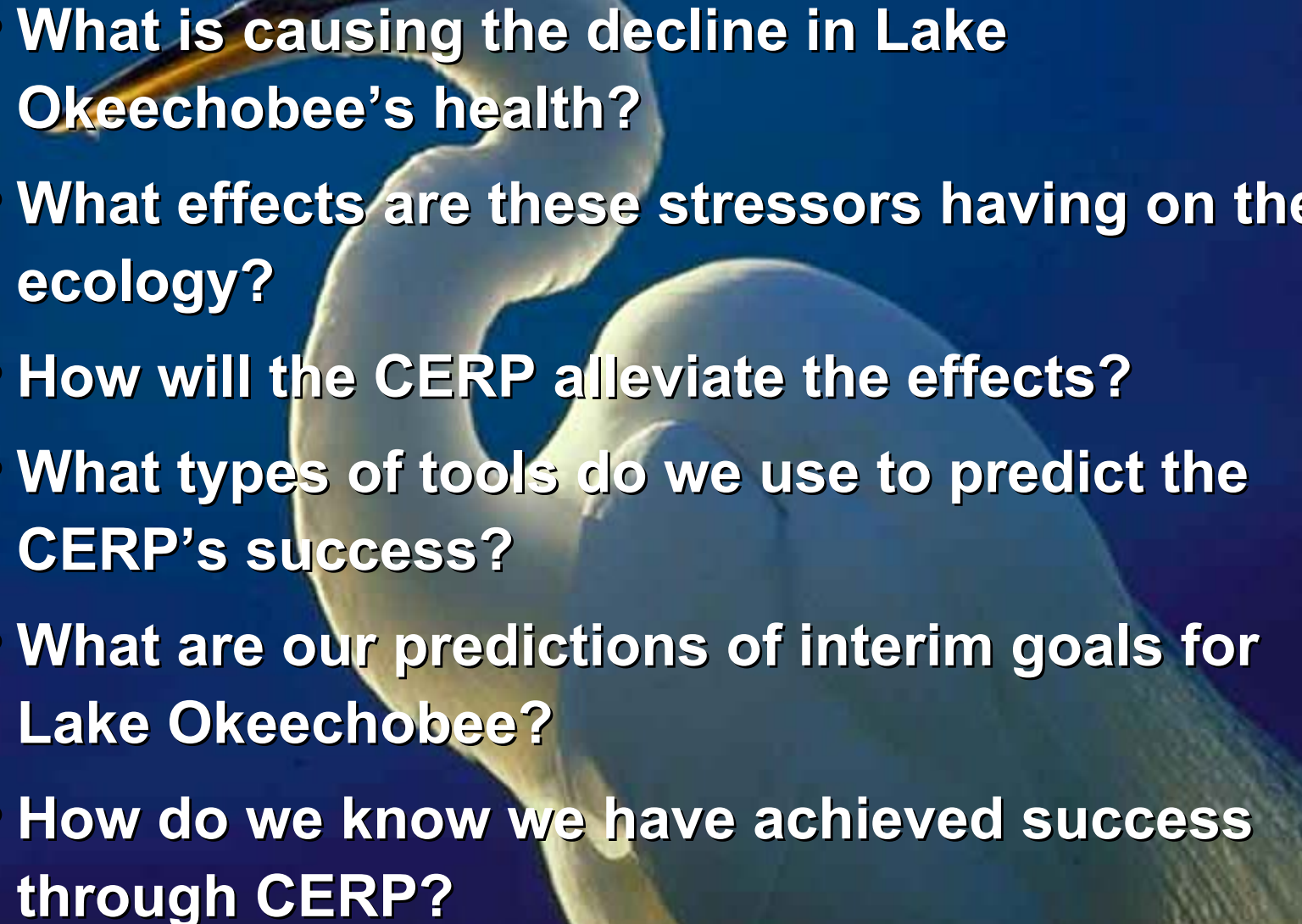
C. Regional Sections

- Northern Estuaries
- Lake Okeechobee
- Greater Everglades
- Southern Estuaries
- Water Supply and Flood Protection

D. Summary of Indicators and Goals / Targets

Each Regional Section “Tells the Story”

Lake Okeechobee example:

- What is causing the decline in Lake Okeechobee's health?
 - What effects are these stressors having on the ecology?
 - How will the CERP alleviate the effects?
 - What types of tools do we use to predict the CERP's success?
 - What are our predictions of interim goals for Lake Okeechobee?
 - How do we know we have achieved success through CERP?
- 
- A white egret is the central focus of the slide, its long neck curved in a graceful S-shape. The bird is positioned in the foreground, with its body and legs partially visible in the water. The background is a deep blue gradient, which makes the white of the egret stand out. The text of the slide is overlaid on the right side of the image, with the title in yellow and the list items in white.

Organization of RECOVER's Recommendations – Appendix

- **Introduction**
- **Indicator Documentation Sheets**
- **List of Acronyms**
- **List of Contributors**

Summary of Indicators*

- 13 Biologic
- 5 Hydrologic
- 5 Water Quality
- 5 Water Supply
- 3 Flood Protection

** Note: This initial set of Interim Goals and Interim Targets will not have predictions for all of these indicators and are designated by a ✓ or 0*

Recommended Interim Goals

NORTHERN ESTUARIES --

- ✓ American Oysters in Northern Estuaries
 - ✓ *St Lucie Estuary*
 - ✓ *Caloosahatchee Estuary*
 - *Loxahatchee Estuary*
 - *Lake Worth Lagoon*
- Submerged Aquatic Vegetation in Northern Estuaries

LAKE OKEECHOBEE --

- ✓ Lake Okeechobee Phosphorus
- ✓ Water Levels in Lake Okeechobee
 - ✓ *Harmful High Stages*
 - ✓ *Harmful Low Stages*
 - ✓ *Spring Recession*
- Lake Okeechobee Algal Blooms
- Lake Okeechobee Aquatic Vegetation

Recommended Interim Goals

EVERGLADES –

- ✓ Water Volume
- ✓ Sheet Flow
- ✓ Hydropattern
 - ✓ *Sawgrass Plains*
 - ✓ *Ridge and Slough*
 - ✓ *Marl Prairies*
- ✓ System-wide Spatial Extent of Habitat
- ✓ Everglades Total Phosphorus
- Periphyton Mat Cover, Structure and Composition
- ✓ Ridge and Slough Pattern
 - ✓ *North Ridge and Slough*
 - ✓ *Central Ridge and Slough*

Recommended Interim Goals

EVERGLADES (cont.) --

- ✓ Everglades Tree Islands
 - ✓ *North Tree Islands*
 - ✓ *Central Tree Islands*
- ✓ Aquatic Fauna Regional Populations
 - ✓ *Northeastern Shark River Slough*
 - ✓ *Western Shark River Slough*
- ✓ American Alligator
 - ✓ *Loxahatchee National Wildlife Refuge*
 - ✓ *Water Conservation Area 2*
 - ✓ *Water Conservation Area 3*
 - ✓ *Shark River Slough*
 - ✓ *Rocky Glades/Marl Prairies*

Recommended Interim Goals

EVERGLADES (cont.) --

- ✓ **System-wide Wading Bird Nesting Patterns**
 - ✓ *Total Number Nesting Pairs*
 - ✓ *Percent Pairs Nesting in Estuaries*
 - ✓ *Timing of Wood Stork Nest Initiation*
 - ✓ *Frequency of Super Colony Events*
- ✓ **Snail Kite**
 - ✓ *Snail Kite Foraging Habitat*
 - ✓ *Apple Snail Habitat*

Recommended Interim Goals

SOUTHERN ESTUARIES* --

- ✓ Salinity Patterns in Florida and Biscayne Bays
 - ✓ *Joe Bay*
 - ✓ *Little Madeira Bay*
 - ✓ *Terrapin Bay*
 - ✓ *Garfield Bight*
 - ✓ *North River Mouth*
 - ✓ Submerged Aquatic Vegetation in Southern Estuaries
 - ✓ *See above*
- * *Predictions for Biscayne Bay are not available for this initial set of Interim Goals*

Recommended Interim Goals

SOUTHERN ESTUARIES (cont.)* --

- ✓ Juvenile Shrimp Densities in Florida and Biscayne Bays (Whipray Basin)

- ✓ American Crocodile

 - ✓ *See above*

- Florida Bay Algal Blooms

* *Predictions for Biscayne Bay are not available for this initial set of Interim Goals*

Recommended Interim Targets

WATER SUPPLY --

- ✓ **Water Volume**
- ✓ **Water Supply for the Lower East Coast Service Area**
- ✓ **Water Supply for the Lake Okeechobee Service Area**
- ✓ **Ability to protect the northern and southern Biscayne aquifer from saltwater intrusion**

Recommended Interim Targets

FLOOD CONTROL --

- ✓ Root Zone Groundwater Levels in the South Miami-Dade Agricultural Area east of L-31N
- Groundwater Stages for Miami-Dade, Broward, Palm Beach and Seminole Tribe Surface Water Management Basins
- Flood Water Removal Rate for the Everglades Agricultural Area

Status and Next Steps

- RECOVER transmitted its recommendations for Interim Goals and Interim Targets to the SFWMD, Corps and Dept of Interior (February 2005)
- The agencies reviewed and approved the RECOVER Technical Report
- The agencies will enter into consultation with the SFER Task Force on an Interim Goals Agreement as required by the programmatic regulations
- Interim Goals and Interim Targets will be revised no later than 2010, using improved science and prediction methodologies

INTERIM GOALS APPROVAL PROCESS OUTLINED IN THE PROGRAMMATIC REGULATIONS



INTERIM TARGETS APPROVAL PROCESS OUTLINED IN THE PROGRAMMATIC REGULATIONS



**CERP
Monitoring
and
Assessment
Plan**

**RECOVER
Assessment
Reports**

**Interim
Goals &
Targets
Reports to
Congress**

**Adaptive
Management
Strategy**

**CERP
Refinements**

**CERP Report
Card**

**National
Research
Council
Independent
Panel**

The Integrated Framework



http://www.evergladesplan.org/pm/recover/igit_subteam.cfm#team



Thank You
Questions?